

**REMARKS**

Claims 1-7 are all the claims pending in the application. No claims are amended herein.

**I. Drawings**

Applicants note that the Drawings filed with the Amendment on October 8, 2004, have been accepted by the Examiner.

**II. Information Disclosure Statement (IDS)**

Applicants also note that an IDS was filed in the present application on May 27, 2005, with a Statement under 37 CFR § 1.97(e), a Statement under 37 CFR § 1.704(d) and a check for the required fee. Therefore, the Information Disclosure Statement and references submitted therewith are properly before the Examiner for consideration. Applicants respectfully request the Examiner to return an initialed copy of the PTO/SB/08 Form submitted therewith with the next Action.

**III. Response to Claim Rejections under 35 U.S.C. § 102**

Claims 1 and 7 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Murata et al (US '099).

Applicants respectfully traverse the rejection and submit that Murata et al does not disclose all elements of the claimed invention.

Applicants have already pointed out that the present invention as recited in Claim 1 provides a vacuum ultraviolet radiation excited light-emitting device comprising a discharge space filled with a rare gas between a front faceplate and a rear faceplate, and a fluorescent material layer provided on the front faceplate, wherein the fluorescent material layer has a

thickness of not more than about 7  $\mu\text{m}$ , which is not disclosed, taught or suggested by Murata et al.

Specifically, Murata et al does not disclose the element of the fluorescent material layer provided on the front faceplate as recited in claim 1. Murata et al discloses that the phosphor layer 41 which emits visible light is formed on the inner wall of each discharge space 39, which is formed by ribs 37 on the surface of the light-emitting substrate 31, or back faceplate. See col. 7, lines 37-60 and Figures 1-2B. Murata et al clearly discloses that the light-emitting substrate 31 opposes the front substrate 11. See col. 5, lines 51-56. Thus, Murata et al does not anticipate the claimed invention for at least this reason. Claim 7 depends from claim 1 and is distinguished over Murata et al for at least the same reason.

In the Office Action dated December 29, 2004, the Examiner states that the terms "front" and "rear" are matters of perspective and do not provide structural limitations as to which of the faceplates is a front or rear one. However, Applicants submit that it is conventional in the art to refer to the substrate or faceplate on the viewer side of a plasma display panel (PDP) as in the present invention as a "front" faceplate or substrate. See, e.g., page 1 lines 18-25 and page 2, lines 13-14 of the present specification and column 5, lines 49-58 of Murata et al. Therefore, one of ordinary skill in the art would readily understand from the language in the present claims and in view of the knowledge and skill of the ordinarily skilled artisan that the terms "front" and "rear" as used in the present claims structurally define the claimed invention and therefore the claimed invention is distinguished over the art. Further Applicants note that it is a fundamental principle of patent law that Applicants may be their own

lexicographers and define the claimed invention in whatever terms they choose as long as the invention is clearly defined. See MPEP § 2173.01.

Accordingly, Applicants respectfully request withdrawal of the rejection.

## **II. Response to Claim Rejection under 35 U.S.C. § 103**

### **A. Ohsawa et al in view of Murata et al**

Claims 1-2 and 5-7 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ohsawa et al ( US '826) in view of Murata et al (US '099).

Applicants respectfully traverse the rejection and submit that Ohsawa et al and Murata et al do not teach or suggest the presently claimed invention, whether taken alone or in combination. Ohsawa et al discloses an ultraviolet excited light-emitting device (see Fig. 2). However, Ohsawa et al does not disclose a vacuum ultraviolet excited light-emitting device as in the present invention. This is significant because one of ordinary skill in the art would not have been motivated to modify Ohsawa et al or combine Ohsawa et al with Murata et al, which is directed to a flat panel display, with a reasonable expectation of success in achieving the claimed invention. Ohsawa et al also fails to teach or suggest a thickness of the fluorescent material layer of not more than about 7  $\mu\text{m}$  provided on the front faceplate of the claimed device as recited in independent claim 1.

While Ohsawa et al indicates that the face panel of the ultraviolet excited light-emitting device may be coated with a phosphor layer, Ohsawa et al does not teach or suggest a specific thickness, much less a thickness of not more than about 7  $\mu\text{m}$  as recited in the present claims. Further, Ohsawa et al discloses, "[t]here is no problem if the light output face (face panel) can be coated fully with the phosphor. However, the current face panel cannot be coated enough

to use the ultraviolet ray effectively in connection with the light output needed to display”.

(column 9 lines 32-36). Thus, Ohsawa et al recognizes that the face panel coated fully with the phosphor cannot be practically used.

Murata et al does not disclose the element of the fluorescent material layer provided on the front faceplate, which is an important aspect of the claimed invention as discussed above. Thus, one of ordinary skill in the art would not have been motivated to modify or combine Ohsawa et al with Murata et al with a reasonable expectation of achieving the claimed invention. Even if Ohsawa et al were combined with Murata, one of ordinary skill in the art would not have had a reasonable expectation of success in achieving the claimed invention wherein the fluorescent material is provided on the front face plate having a thickness of not more than about 7  $\mu\text{m}$ . Claims 2 and 5-7 depend from claim 1 and are distinguished for at least the same reason.

In the Office Action dated December 29, 2004, the Examiner states that the argument that Ohsawa et al teaches away from the claimed invention is not persuasive because at column 9, lines 32-36, Ohsawa teaches a method for carrying out the embodiment wherein the front faceplate is coated with the fluorescent material and because the present claims do not require a continuous phosphor layer or layer which covers all of the area disposed on the front faceplate. However, Applicants submit that the Ohsawa et al teaches that such an embodiment of coating the faceplate is impractical for the reasons stated above and in the Amendment previously filed on October 8, 2004. Further, Applicants direct the Examiner's attention to the entire disclosure at column 9, lines 32-50, wherein Ohsawa et al describes how to solve the problem of not being able to coat the face panel enough to use the ultraviolet ray effectively in

connection with the light out put needed to display by providing a thin film interference layer on the opening for feeding out the display light. Column 9, lines 36-48. Ohsawa further states that it makes no sense to coat the phosphor on the face panel where the face panel has no thin film interference layer. Therefore, Ohsawa et al, as a whole teaches that the front face panel can be coated effectively only when a thin film interference filter is used. Thus, one of ordinary skill in the art would not have been motivated to combine Ohsawa et al and Murata as suggested by the Examiner. Since there is no reasonable motivation to combine the references, Applicants submit that the Examiner has not made a *prima facie* showing of obviousness.

Accordingly, Applicants respectfully request withdrawal of the rejection.

**B. Anandan et al. (US '324) in view of Murata et al.**

Claims 1-4 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Anandan et al (US '324) in view of Murata et al '099.

Applicants respectfully traverse the rejection and submit that Anandan et al and Murata et al do not teach or suggest the presently claimed invention, whether taken alone or in combination.

Applicants have already pointed out in the Amendment filed on October 8, 2004, that Anandan disclose a fluorescent lamp filled with mercury and inert gas. However, Anandan does not disclose a vacuum ultraviolet excited light-emitting device such as a plasma display panel (PDP) or the light-emitting device filled with rare gas such as in the present invention. This is significant because one of ordinary skill in the art would not have been motivated to modify Anandan or to combine Anandan with Murata et al, which is directed to a flat panel display with a reasonable expectation of success in achieving the claimed invention. Furthermore, Anandan

does not disclose that the phosphor layer has a thickness of not more than about 7  $\mu\text{m}$ . Murata et al fails to remedy the deficiencies of Anandan et al. Specifically, as discussed above, Murata et al does not disclose the element of the fluorescent material layer provided on the front faceplate, which is an important aspect of the claimed invention.

In view of the above Applicants submit that the Examiner has not established a *prima facie* showing of obviousness since one of ordinary skill in the art would not have been motivated to combine the references. Claims 2-4 depend from claim 1 and are distinguished for at least the same reason.

Accordingly, Applicants respectfully request withdrawal of the rejection.

### **III. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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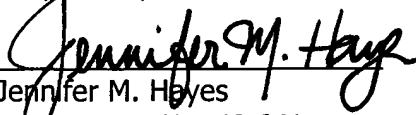
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